STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a VECTREN ENERGY DELIVERY OF INDIANA, INC. (VECTREN SOUTH – ELECTRIC)	**)**	**CAUSE NO. 43839**

DIRECT TESTIMONY

OF

KORLON L. KILPATRICK - PUBLIC'S EXHIBIT NO. 11

ON BEHALF OF

THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

JUNE 25, 2010

TESTIMONY OF KORLON L. KILPATRICK
CAUSE NO. 43839
VECTREN SOUTH ELECTRIC

I. INTRODUCTION

Q: Please state your name and business address.

A: My name is Korlon L. Kilpatrick and my business address is 115 West Washington Street, Suite 1500 South, Indianapolis, Indiana 46204.

Q: By whom are you employed and in what capacity?

A: I am employed by the Indiana Office of Utility Consumer Counselor (OUCC) as a Utility Analyst in the Resource Planning and Communications Division.

Q: Please describe your background and experience.

A: I hold a Bachelor of Arts degree with a major in computer science from Harvard College and a Master of Business Administration degree with a major in finance from the University of North Carolina – Chapel Hill. I also serve as an Adjunct Professor in the Graduate School of Business at the University of Indianapolis. Lastly, I am a candidate in the Chartered Financial Analyst program.

I have been employed at the OUCC since October 2009 as a Utility Analyst. To date, my work at the OUCC has focused on economic and financial analysis of various regulatory issues including demand-side management (DSM) and energy efficiency issues. I regularly attend Midwest ISO committee meetings and serve as the Public Consumer Advocate sector representative to the Finance subcommittee.

Immediately prior to joining the OUCC, I was part of the senior management team at a start-up business, and prior to that, I worked for several years as a management consultant performing economic and financial analysis for clients in various industries.

Q: What is the purpose of your testimony?

A: I provide an analysis of the Petitioner's cost of equity. First, I present my cost of equity analysis and recommendation. Next, I discuss the company's capital structure and overall cost of capital. Finally, I critique the Petitioner's cost of equity analysis and testimony.

Q: What have you done to prepare for your presentation of testimony in this proceeding?

A: I reviewed the petition and exhibits filed by Vectren South. Additionally, I conducted relevant discovery and reviewed the results as well as reviewed various publications related to cost of equity. I attended segments of the evidentiary hearings held from March 8, 2010 to March 12, 2010 and reviewed a portion of the transcripts from that hearing. Finally, I attended numerous meetings with OUCC staff, attorneys and consultants to discuss the issues in this Cause.

II. COST OF EQUITY RECOMMENDATION

Q: Please describe the examination and analysis you conducted in order to prepare your testimony and formulate your opinions in this Cause.

A: I employed three recognized methodologies to estimate the cost of equity in this Cause. The three methodologies are: capital asset pricing model (CAPM); constant-growth discounted cash flow (DCF); and a two-stage discounted cash flow. Each of

these methodologies is applied to the same proxy groups developed and used by Petitioner's Witness, Dr. William Avera, in his direct testimony.

Q: What is your recommendation for cost of equity for Vectren South?

A: My overall cost of equity recommendation for Vectren South is a range of 8.0 to 9.5 percent with a specific recommendation of 9.25 percent. I have used a rate at the higher end of my recommended range in recognition of the Petitioner's need to attract capital and the current economic conditions. Table KLK-1 below summarizes the various analyses used to determine this recommendation:

Table KLK-1
Recommendation Summary

Methodology	Range
Capital Asset Pricing Model	7.43 – 8.99
Constant-Growth DCF	6.75 – 11.05
Two-Stage DCF	7.25 – 10.76

Each of these methodologies will be described in more detail in my testimony that follows. Using a capital structure that employs both the investor and the non-investor sources in the capitalization, I recommend an overall rate of return of 6.79 percent for Vectren South. These findings are summarized in Exhibit KLK-1.

III. CAPITAL ASSET PRICING MODEL (CAPM)

Q: Please describe your understanding of CAPM.

A: The capital asset pricing model (CAPM) is a widely used risk-and-return model in the development of a recommended cost of equity. In essence, the CAPM states that the cost of equity is equal to the return on risk-free securities, plus the company's systematic risk (beta) multiplied by the market risk premium. The CAPM equation is as follows:

$$r_i = r_f + \beta_i(r_m - r_f) \quad (1)$$

where r_i = required rate of return for stock *i*;
r_f = risk-free rate;
r_m = expected return on the market; and
β_i = beta for stock *i*

The fundamental idea underlying the CAPM is that risk-averse investors demand higher returns for assuming additional risk and higher-risk securities are priced to yield higher expected returns than lower-risk securities.

Q: How did you determine the risk-free rate used in your CAPM analysis?

A: As a proxy for the risk-free rate, I use 4.57 percent. This is the 5-month average yield on the 30-year US Treasury bond. Table KLK-2 below details the yield curve for the various US Treasury constant maturity securities. It shows the average yield as well as the high and low yields over the period from January 1, 2010 to June 2, 2010.

Table KLK-2
U.S. Treasury Yield Curve Data[1]

	1-mo	3-mo	6-mo	1-yr	2-yr	3-yr	5-yr	7-yr	10-yr	20-yr	30-yr
Avg	0.1	0.13	0.21	0.38	0.93	1.47	2.41	3.12	3.68	4.42	4.57
High	0.17	0.18	0.27	0.49	1.18	1.77	2.75	3.46	4.01	4.69	4.85
Low	0.01	0.04	0.13	0.30	0.75	1.19	2.01	2.63	3.18	3.91	4.07

In The Cost of Capital: A Practitioner's Guide by David Parcell, he states that "the rationale for choosing a maturity level normally revolves around the interpretation of the 'risk free return that would be expected to prevail during the period that the

[1] Board of Governors of the Federal Reserve System, Treasuries Constant Maturities, 4 June 2010, available from https://www.federalreserve.gov/datadownload/Choose.aspx?rel=H.15; Internet; accessed 4 June 2010.

pending order is expected to be in force'."[2] Given this, one could easily choose a maturity in the 2 to 5 year range assuming that the Petitioner would come in for a new rate case in the next 5 years.

Q: Why did you select the 30-year US Treasury bond rate as your proxy?

A: The expected common stock return is based on very long-term cash flows, regardless of the individual investor's holding period. Long-term rates are the relevant benchmark, especially when seeking to match return horizons. Short-term rates tend to be more volatile and are subject to more random market dynamics than long-term rates. Short-term rates also are largely influenced by the Federal Reserve for the purposes of implementing monetary policy rather than reacting to market forces. Additionally, the yields on long-term government bonds match more closely with common stock returns with respect to stability and consistency. Utility assets generally have long-term useful lives and should be matched with very long-term maturity financing instruments – e.g. bonds. Finally, it should be pointed out that in choosing the 30-year Treasury Bond yield I have selected the value on the high end of the risk-free rate spectrum. Using this rate ensures that my results will not produce an underestimation.

Q: What does the beta coefficient represent?

A: One of the central axioms in financial theory is that "the risk of a well-diversified portfolio depends on the market risk of the securities included in the portfolio."[3] In order to measure a security's market risk, one needs to measure how sensitive it is to

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[2] David C. Parcell, The Cost of Capital: A Practitioner's Guide (Richmond, VA: Technical Associates 1997) pp. 6-18.

[3] Richard A. Brealy and Stewart C. Myers, Principles of Corporate Finance (New York: McGraw-Hill. 1996) p. 160.

market movements. This sensitivity is called beta (β). The beta coefficient states the extent and direction of movement in a stock's rate of return relative to the same movements of the market as a whole. Securities with betas greater than 1.0 tend to amplify the overall movement of the market whereas securities with betas between 0 and 1.0 tend to move in the same direction as the market, just not as dramatically. Since I am conducting a proxy group analysis similar to Dr. Avera, I did not choose a single beta coefficient to represent the group. Instead, I am using the beta values provided by Value Line for the individual companies to create a dataset of estimated cost of equity figures.

Q: What market risk premium estimate did you use in your CAPM analysis?

A: For the market risk premium, I used the difference in total returns between large stocks and long-term government bonds from the Ibbotson analysis.[4] These differences are 4.4 and 6 percent based on geometric and arithmetic means, respectively. Using these rates as endpoints, I use the midpoint measure of 5.2 percent as my risk premium estimate. This approach gives equal weight to the geometric and arithmetic mean approaches to measuring the historical market risk premium.

Q: Why did you give equal weighting to the arithmetic and geometric means?

A: There are several financial textbooks and academic articles that advocate the use of one over the other when performing a CAPM analysis. I believe that the geometric mean provides a better representation of expected returns than the arithmetic mean

[4] Morningstar, 2010 Ibbotson Stocks, Bonds, Bills and Inflation (SBBI) Classic Yearbook (Chicago: Morningstar, Inc., 2010), p. 82.

when using historical returns. However, in previous IURC orders, the Commission has requested that both means be considered.[5] Thus, I am considering both by providing an equal weighting to each.

Q: Why did you use the total return for the bond as opposed to the income return?

A: I used the total return because it represents both components of return – income and appreciation – that investors expect from an investment. Many argue that the income return is a purer representation of the risk-free return because it is not subject to price risk. However, price risk only exists if the investor does not hold the bond to maturity. Since we are looking for the risk-free rate for a long-life asset, there is no reason to assume that the asset would not be held until maturity.

Q: Why did you use long time periods in arriving at your historical market risk premium?

A: When developing an estimate for cost of equity, it is important to match return horizons of the inputs as best as possible. Using a long time period for my market risk premium follows that same philosophy. An added benefit of using a long time period is that it helps to mitigate the cyclicality that occurs in the market. Dr. Roger A. Morin has stated this same thought:

> Because realized returns can be substantially different from prospective returns anticipated by investors when measured over short term periods, it is important to employ returns over long time periods rather than returns realized over more recent time periods when estimating the market risk premium with historical returns. Therefore, a risk premium study should consider the longest possible period for which data is available. Short-run periods which investors earned a lower risk premium than they expected are offset by short-run periods during which investors earned a higher risk premium than

[5] *See* Peoples Gas & Power Rate Case, IURC Cause No. 39315; Indiana Cities Water Corp., IURC Cause No. 39166; Indianapolis Water Corp. Approval of Merger and Rate Change, IURC Cause No. 39713.

> they expected. Only over long periods of time will investor return expectations and realizations converge.[6]

Using a long time period allows the short-term market dynamics to smooth themselves out over several business and interest rate cycles.

Q: What are the results of your CAPM analysis?

A: As shown in Exhibits KLK-2 and KLK-3 and summarized in the table below, inserting the previously described input values, namely a risk-free rate of 4.57 percent, company-specific betas, and a market risk premium of 5.2 percent into the CAPM equation yields the following results:

Table KLK-3
CAPM Analysis Results

Proxy Group	Range	Midpoint	Average
Utility	7.43 to 8.99	8.21	8.10
Non-utility	7.17 to 10.29	8.73	8.65

IV. CONSTANT-GROWTH DISCOUNTED CASH FLOW (DCF) MODEL

Q: Please describe your application of the discounted cash flow model.

A: According to financial theory, the value of any security to an investor is the expected discounted value of the future stream of dividends or other benefits. One widely used method to measure these anticipated benefits is to examine the current dividend plus the increases in future dividend payments expected by investors. For companies that have a stable growth rate in earnings and dividends, the stock price can be calculated with a discounted cash flow valuation model. The present value of the cash flows on a single share of equity can be written as follows:

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[6] *See* Direct Testimony of Roger A. Morin, Ph.D, Public Service Company of New Hampshire, NHPUC Docket No. DE 04-177.

$$P_0 = \frac{DIV_1}{1+r} + \frac{DIV_1(1+g)}{(1+r)^2} + \frac{DIV_1(1+g)^2}{(1+r)^3} + \ldots \qquad (2)$$

where DIV_1 = expected dividends per share in year 1
r = required rate of return (cost of equity) during forecast period
P_0 = price of stock at the end of year 0
g = constant growth rate

The DIV_1 component is a forward-looking value and grows at a constant rate of g. Given the constant growth of the DIV_1 component, the present value calculation is the sum of an infinite geometric series. Because it is a geometric series, it converges to a finite sum that can be simplified as such

$$P_0 = \frac{DIV_1}{r-g} \qquad (3)$$

Re-arranging this equation allows one to obtain an estimate of r from DIV_1, P_0 and g:

$$r = \frac{DIV_1}{P_0} + g \qquad (4)$$

From this arrangement, one can see that the rate of return is a function of the dividend yield and the expected growth rate. This formation also allows the analyst to see that the total return is a function of income (i.e. dividend yield) and appreciation (i.e. growth rate).

Q: Please discuss your choice of the dividend yield input variable.

A: The first step in my DCF analysis was to assemble several estimates of dividend yields for the companies in the respective proxy groups. Exhibits KLK-4 and KLK-5 detail the various dividend yields used in my analysis.

Q: Please discuss your choice of the growth rate input variable.

A: A reasonable estimate of long-term (i.e. beyond five years) growth is the estimated growth of the economy. When considering viable proxies for economic growth, I chose the long-term growth estimate of the U.S. Gross Domestic Product (GDP). The nominal growth forecast for U.S. GDP is 4.45 percent. This figure is the central tendency figure in recent forecasts by Federal Reserve and the Congressional Budget Office (CBO).[7, 8]

Q: Did you make any adjustments to your analysis results?

A: Yes. Consistent with IURC prior orders,[9] I eliminated values that were outside a reasonable range of possibility on both the low and high ends of the spectrum.

Q: Please explain how you determined your "reasonable range of possibility".

A: On the low end, I eliminated all results that were less than 6.25 percent - Vectren South's cost of debt.[10] Under normal circumstances, an equity investor would not purchase a security that returned less than a firm's long-term debt and be subjected to greater risk. On the high end, I eliminated all results that were greater than 12.68 percent. Exhibit KLK-8 details how I derive the high-end value using an average sector beta and Dr. Avera's risk-free rate and equity risk premium. This value is reasonable because 1) it has a linear relationship to the other values, 2) it is rational in its determination and 3) it is a premium to Dr. Avera's stated market return of 11.9 percent.[11] Given the low-beta profile of the companies in the utility and non-

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7 Minutes from the Federal Open Markets Committee, January 27-38, 2009.
8 Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010 to 2020 (Washington, DC: Congress of the United States, January 2010) p. 4.
9 Indiana American Water Company Rate Case, Cause No. 40103
10 *See* Supplemental Direct Testimony of M. Susan Hardwick, Vectren South, IURC Cause No. 43839, Exhibit MSH-S3.
11 *See* Direct Testimony of Dr. William E. Avera, Vectren South, IURC Cause No. 43839, p. 36, line 10.

utility proxy groups, this last point is important. It extends the high end beyond the market return and ensures that I am not underestimating the cost of equity by including results that exceed the market return.

Q: What are the results of your constant-growth DCF analysis?

A: As shown in Exhibits KLK-4 and KLK-5 and summarized in the table below, my application of the constant growth DCF model yields cost of equity estimates in the range of 6.28 to 10.61 percent with a midpoint of 8.45 percent.

Table KLK-4
DCF Analysis Results

	Range	Midpoint	Average
Utility	6.75 to 11.05	8.90	9.13
Non-Utility	6.25 to 10.85	8.55	7.49

V. TWO-STAGE DCF MODEL

Q: Please describe the benefits of a multi-stage DCF model.

A: The two-stage model allows one to give weight to both the near-term growth rates provided by analysts and the long-term growth consistent with the economy. Additionally, because the economy is starting to recover from the recession, the analysts' forecasts may reflect the "optimism" of the recovery and includes a "market rebound". The two-stage model allows one to capture this "optimism" for the first stage in the stock valuation while also tempering it with a long-term growth perspective in the second stage. The equation for this model is as follows:

$$P_0 = \frac{DPS_0(1+g_1)\left(1-\frac{(1+g_1)^n}{(1+r)^n}\right)}{r-g_1} + \frac{DPS_0(1+g_1)^n(1+g_2)}{(r-g_2)(1+r)^n} \qquad (5)$$

where DPS_0 = expected dividends per share in year *0*

	r	=	required rate of return (cost of equity) during forecast period
	P_0	=	price of stock at the end of year 0
	g_1	=	growth rate during the first stage
	g_2	=	growth rate during the second stage
	n	=	length of the first stage (in years)

Q: Please discuss your choice of the input variables.

A: For the P_0 input, I used the closing price on January 4, 2010,[12] adjusted for dividends, for each of the individual securities in the proxy groups. For the DPS_0 input, I used the 2009 dividends paid per share figure. This figure came from the Value Line summaries and it is widely available from most financial information sources. For the g_1 input, I used the Value Line growth rate from Dr. Avera's exhibits. For the n input, I used 5 years. This aligns with the length of the analysts' forecasts. For the g_2 input, the formula calls for a long-term growth estimate that is sustainable in perpetuity. Using this as my frame of reference, I opted to use the previously discussed 4.45 percent U.S. GDP forecast as my nominal growth estimate.

Q: How did you derive the cost of equity values?

A: Given the difficulty of re-arranging the above equation with respect to r, I used a non-linear optimization in conjunction with the Goal Seek function in MS Excel to solve for r. However, the value components of the model are easily explained. The value of the equity is viewed in terms of two components – the extraordinary growth phase and the stable growth phase. The extraordinary growth phase allows for a period of abnormal growth. In this case, the "optimism" of the recovery can be captured as represented in the analysts' near-term growth forecasts. Then, in the

[12] January 4, 2010 was the first trading day in 2010.

stable growth phase, the model is able to reflect long-term, sustainable growth rate. This is represented by the long-term growth forecast of the US GDP. The rationale is that a company cannot grow faster than the economy for an indefinite period. The annual rate of return used to discount the cash flow of dividends back to the price of the stock is the cost of equity.

Q: What are the results of your two-stage DCF analysis?

A: As shown in Exhibits KLK-6 and KLK-7 and summarized in the table below, my application of the two-stage DCF model yields cost of equity estimates in the range of 6.28 to 10.76 percent:

Table KLK-5
Two-Stage DCF Analysis Results

Proxy Group	Range	Midpoint	Average
Utility	7.25 to 10.76	9.00	9.42
Non-utility	6.28 to 10.74	8.51	8.21

Q: Discuss how this analysis factors into the overall cost of equity recommendation.

A: First, it provides a valuable perspective on the cost of equity estimate. Since the two-stage DCF is based on two clearly delineated growth stages, it is best suited to capture the period of growth forecasted by the analysts as well as the period of stable long-term growth. Comparing the results of this analysis to those of the constant-growth DCF approach, one can see that my analyses produce very similar outcomes. The min-max range on the two-stage DCF is smaller than that of the constant-growth DCF. However, the midpoints are essentially the same. The most significant difference is the average return on proxy group. Using the utility proxy group, one can observe a 29 basis point increase using the two-stage DCF. This is not surprising

since the two-stage DCF factors in a period of abnormal growth in its calculation. My two-stage DCF approach reinforces the results obtained from the constant-growth approach and the overall recommended range.

VI. CAPITAL STRUCTURE

Q: What conclusions have you drawn based on your review of the Petitioner's capital structure?

A: The equity percentage in Vectren's corporate structure repeatedly decreases as you step down from parent corporation, to the holding company, and ultimately the subsidiaries. The stark dip in equity percentage for VVC and Vectren South in 2009 can be attributed to an increase in long-term debt in that particular entity.

Equity as a Percentage of Permanent Capital is calculated as follows:

Total Permanent Equity / (Total Permanent Equity + Long-term Debt)

	2005	2006	2007	2008	2009
Vectren Corporation (NYSE: VVC)	48.8%	49.3%	49.8%	52.0%	47.6%
Vectren Utility Holdings, Inc. - (VUHI)	50.6%	50.8%	50.6%	53.9%	50.4%
Southern Indiana Gas and Electric Company, Inc. - (Vectren South)	58.6%	56.1%	55.8%	58.1%	52.0%
Indiana Gas Company, Inc. - (Vectren North)	59.5%	57.5%	55.4%	54.2%	53.2%

Although a certain amount of double leverage may exist, it does not rise to an egregious level in this Cause. Therefore, I have determined Petitioner's capital structure is in the range of reasonableness.

Q: Please describe the capital structure ratios you used in your analysis.

A: I used the capital structure ratios as proposed by Vectren South in its test year. The resulting capital structure ratios are as follows:

Source of Capital	Ratio	Cost
Long-Term Debt	43.58	6.25
Common Equity	43.47	9.25
Customer Deposits	0.49	3.43

Cost-Free Capital	12.07	0.00
Job Development Investment Tax Credit	0.40	7.75

The proposed capital structure is detailed by Petitioner's Witness M. Susan Hardwick in Exhibit MSH-S3. Applying the capital structure ratios to the associated cost rates results in a weighted average cost of capital of 6.79 percent.

VII. CRITIQUE OF DR. AVERA'S TESTIMONY

Q: What is the purpose of this section of your testimony?

A: This section discusses my opinions of the cost of equity analyses presented by Petitioner's Witness, Dr. William E. Avera.

CAPM ANALYSIS

Q: Please summarize your disagreements with Dr. Avera's CAPM analysis.

A: I have no objection to Dr. Avera's use of a market DCF analysis to derive an equity risk premium. My concern is with his inputs. There are inconsistencies in this area that call into question the validity of the equity risk premium utilized by Dr. Avera.

Q: Please explain your concern regarding the dividend yield used by Dr. Avera in determining the market return.

A: At page 35, lines 25 - 26 of Dr. Avera's direct testimony, he states that "the expected market rate of return was estimated by conducting a DCF analysis on the dividend paying firms in the S&P 500." The S&P 500 index is widely regarded as a bellwether of the US economy and is often used as a proxy for the market as a whole. The market is comprised of both dividend-paying and non-dividend-paying stocks. So, to derive a "market dividend yield" using only a portion of the stocks in the market proxy would lead to an imprecise conclusion. There are several dividend

yield estimates for the S&P 500 Index available. In fact, Standard & Poor's provides S&P 500 Index dividend yield information on its website from 1988 to today.[13] As of March 31, 2010, Standard & Poor's reports that the index's dividend yield is 1.87 percent.

Q: Please explain your concern regarding the market growth rate used in determining the market return.

A: The 9.2 percent rate is a five-year growth rate. The DCF model requires a growth rate that is long-term and sustainable into perpetuity. A five-year horizon is too short of a period to be considered either long-term or sustainable into perpetuity. It is irrational to assume or to expect that the market will grow at 9+ percent per year into perpetuity, especially considering that US GDP is expected to grow at 4.45 percent in nominal terms.

Q: But, if the investor's expected holding period is only three to five years, is it not appropriate to use a growth rate that matches the investment horizon?

A: No. It is understandable that an investor might not look into the "distant horizon". However, for the purpose of rate of return determination, prudent analysts must look into the "distant horizon." The mechanics of valuation require it. The DCF calculation as expressed in Equation 3 is able to be simplified to that format because it is an infinite geometric equation. Even if the investor wanted to solely analyze his or her investment window and the cash flows within it, the critical cash flow value that he or she would need is the terminal value, or the selling price, of the equity at some time T in the future. That terminal value is based on the discounted future cash

[13] Standard & Poor's, S&P 500 Index Earnings, 27 May 2010, available from http://www.standardandpoors.com/indices/sp-500/en/us/?indexId=spusa-500-usduf--p-us-l--; Internet; accessed 27 May 2010.

flows at time T. So, there is no way to value a security using the DCF model without considering cash flows into perpetuity.

Q: Are there other concerns that you have with Dr. Avera's equity risk premium calculation? If so, what are they?

A: Yes. The 7.6 percent market risk premium is calculated by taking the 11.9 percent market return, derived from a DCF analysis using a five-year rate, and subtracting the risk-free rate of 4.3 percent, the yield on the 20-year US Treasury bond. One must take great strides to ensure that the duration of the inputs match. The 20-year term of the risk-free rate is incongruous with the five-year term of the market return. This incongruity calls into question the validity of Dr. Avera's market risk premium. Lastly, Dr. Avera's equity risk premium is driven by his DCF methodology. While the DCF can be used to determine the market return, any biases in his DCF method will certainly bias his CAPM analysis as well.

DCF ANALYSIS

Q: Please summarize your disagreements with Dr. Avera's DCF analysis.

A: I have two principal disagreements with Dr. Avera's DCF analysis. The first is his use of three-to-five year growth rates as inputs to his constant-growth DCF model. The second is his approach to eliminate outlier results from his data set.

Q: Why is it a concern that growth rates with a three-to-five year horizon are used?

A: One of the principle assumptions of the constant-growth DCF model is that it assumes that the growth rate will last forever. In his direct testimony, Dr. Avera states this very fact.[14] Given this assumption and Dr. Avera's agreement with it, one

[14] *See* Direct Testimony of Dr. William E. Avera, Vectren South, IURC Cause No. 43839, p. 26, line 8.

must question the reasonableness of his use of near-term growth rates with a short horizon. Using a growth rate that is higher than the long-term, sustainable rate results in an inflated estimation of future cash flows and result in an upward bias on the resulting cost of equity.

Q: Why are the near-term growth prospects higher than the growth rates that a company might see long-term?

A: At this point in time, the economy is starting to rebound. This may provide a "recovery bounce" with respect to its near-term growth prospects. However, these near-term growth forecasts reflect the optimism of the recovery and not necessarily the long-term, sustainable growth potential.

Q: What is a reasonable estimate of the growth prospects for any company beyond the five-year benchmark?

A: A reasonable estimate of long-term growth is the estimated growth of the economy. In his book, *The Equity Risk Premium*, Bradford Cornell supports this assertion with the following:

> long-run company growth eventually falls to the rate on long-run economic growth or less.[15]

As the above citation points out, the long-run economic growth is the upper boundary on a company's long-run growth prospects. One of the more accessible measures is the long-term growth estimate of the U.S. Gross Domestic Product (GDP).

Q: How do investors weigh these 3-5 year growth forecasts that they receive from analysts versus the growth prospects beyond the five-year benchmark?

A: In general, utilities have been viewed as defensive stocks and not as growth

[15] Bradford Cornell, The Equity Risk Premium: The Long-Run Future of the Stock Market (New York: John Wiley & Sons, Inc. 1999) p. 106.

investments. In fact, the utility sector has been known as the "widows and orphans" stocks for its ability to protect capital in good and bad markets as well as to provide income via dividends. With respect to future growth opportunities, the recent economic downturn may have caused many ratepayers to reduce their electricity consumption as a cost-cutting measure. Now that the economy is starting to recover, there may be an increase in consumption. Vectren South, along with other electric utilities, is anticipating a higher-than-normal growth rate in the near-term before reverting back to a normal, or sustainable, rate of growth. Instead of assuming that this near-term growth rate is truly sustainable into perpetuity, it is better to take both the near-term and the long-term growth rates into consideration when determining the cost of equity. Fortunately, financial theory provides an extension to the DCF model that takes two stages of growth into account.

Q: What are your concerns with Dr. Avera's elimination of outlier results in his analysis?

A: My concern is not with the elimination of estimates that are outliers. I actually agree with Dr. Avera that "it is essential that the resulting values pass fundamental tests of reasonableness and economic logic."[16] However, my concern is the approach that he uses to eliminate results (or his failure to do so), especially at the high end.

On page 32 of his direct testimony, Dr. Avera describes a rational approach of comparing results to the yield of the utility's bonds to determine how to eliminate results at the low end. In the supplemental direct testimony of Petitioner Witness Susan Hardwick, she sponsors exhibit MSH-S3 that details the capital structure of

[16] *See* Direct Testimony of Dr. William E. Avera, Vectren South, IURC Cause No. 43839 p. 31, lines 25–26.

Vectren South. This exhibit shows Vectren South's cost of debt to be 6.25 percent. Using Dr. Avera's approach, 6.25 percent should serve as the threshold for eliminating results on the low end. However, when reviewing Dr. Avera's exhibit WEA-5, it is clear that he has eliminated several results that are in the range of 6.3 to 6.8 percent. Given that these rates are greater than the yield on Vectren's debt, it is unclear exactly what critierion Dr. Avera is using to eliminate results on the low end. This unsubstantiated decision appears to have been made to lead to the obvious result of creating a higher resultant range by removing low-end values that should not be removed.

With respect to his approach for eliminating values on the high end, he does not describe the approach that he uses. However, reviewing exhibit WEA-5, one can deduce that 17.3 percent is the threshold that was used on the high end. This is excessively high. Next, the members of the proxy groups, with the exception of five companies in the non-utility group, have betas that are 1.0 or less. It should not be expected that they would earn a return greater than that of the market which has a beta of 1.0. According to Dr. Avera's own analysis, the market return over the next five years is estimated to be 11.9 percent. While one might add a premium to a "range of reasonableness", a 540 basis-point premium is not reasonable. In light of this, Dr. Avera's 17.3 percent threshold on the high end is unsubstantiated and unreasonably high.

FLOTATION COSTS

Q: Dr. Avera adds 20 basis points to the results of his cost of equity analysis range for flotation costs. Is this adjustment necessary?

A: No. First, his justification for the adjustment is based on a common stock issuance from mid-2008 that is related to a forward sale agreement entered into in 2007. Furthermore, while his adjustment calculation / determination is based on the actual expense incurred by Vectren for the transaction, adding it to cost of equity allows it to be applied to a much larger base. This opens the door for recovery of funds that far exceed the actual expense incurred. And, in the absence of equity issues, it would provide a mechanism for unreasonable recovery.

RISK AND FIRM SIZE

Q: Please describe Dr. Avera's risk and firm size argument.

A: Dr. Avera states on page 45 of his direct testimony that "…it is well accepted that smaller firms are more risky than their larger counterparts" and he goes on to state that "the size relationship is well established…in financial literature." He continues to assert that this size relationship warrants an adjustment to the cost of equity calculation. While he does not make the adjustment, he suggests that a 100 basis point adjustment is appropriate and that it be considered when making a cost of equity determination along his recommended range.

Q: Do you agree with Dr. Avera's assertion that the cost of equity estimation be adjusted for firm size?

A: No. While the size relationship of which he speaks is widely documented and is often applied to industrial companies, the regulated nature of the electric industry mitigates any effects that firm size may have had. Research conducted by Wallace Davidson III, et al shows that there is no evidence of either a positive or negative

effect on the return on equity related to size within the electric industry.[17] Additionally, their research indicates that there are no risk differences between small and large utilities.[18] Different research from Dr. Annie Wong indicates that "the business and financial risks are very similar among the utilities regardless of their sizes" and that "there is no need to adjust for the firm size in utility rate regulations."[19]

IMPACT OF TRACKERS

Q: Dr. Avera states that while trackers help to mitigate some risk they do not eliminate them or alter the company's risk profile. Do you agree with this?

A: No. And, more importantly, neither do investment professionals. Based on research performed by equity analysts, the perception of accredited investors is that trackers do lower the risk profile of a utility. The investment thesis in a recent equity research report by Bank of America Merrill Lynch on Vectren Corporation states:

> VVC mgmt focus on regulatory initiatives, including margin decoupling, weather normalization and aggressive cost recovery foster a lower business risk utility earnings profile.[20]

Clearly, investment professionals have a different perception and expectation of trackers than Dr. Avera.

SOLE RELIANCE ON ANALYST'S FORECASTS

Q: Dr. Avera states that historical performance is not likely to be representative of investors' expectations. Do you agree with this statement? If not, please elaborate.

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[17] Wallace Davidson III, Kenneth Ferris and William Reichenstein, A Note on the Relationship Between Firm Size and Return in the Electric Utility Industry, *Journal of Accounting, Auditing & Finance* Vol. 8, Issue 3 (Summer 1993): pp. 193–202.

[18] Id.

[19] Annie Wong, Utility Stocks and the Size Effect: An Empirical Analysis, *Journal of the Midwest Finance Association* (1993): pp. 95–101.

[20] Gabe Moreen et al., eds., Vectren Corp – Proliance is the weak link in 1Q10; guidance unchanged, (Equity Research note, Bank of America Merrill Lynch, 14 May 2010), p. 2.

A: No. While historical rates may not serve as the sole basis of investors' expectations, they certainly influence or temper their expectations. Historical rates provide a measure against which to calibrate any forecasts or expectations of future performance. An investor would use historical rates as a part of any fundamental analysis that is performed to evaluate an investment decision. In fact, Dr. Avera made this very point during his examination testimony with the Commission in this Cause. In answering a question from Chairman Hardy regarding whether different investor groups might have purchased Vectren stock on June 23, 2008 and December 1, 2009 given the different prices, Dr. Avera states:

> For example, Vectren's earnings were somewhat disappointing in the last several quarters, so as investors look out into the future, they say let's change our growth expectations about Vectren.[21]

From his own admission, one can see that investors take past performance into consideration when setting their future expectations.

Q: Is there additional research that supports investors' use of historical growth rates?

A: Yes. In *Regulatory Finance: Utilities' Cost of Capital*, Dr. Roger A. Morin states the following:

> Obviously, historical growth rates as well as analysts' forecast[s] provide relevant information to the investor with regard to growth expectations. In view of the empirical evidence and the conceptual discussion of the previous sections, and provided no structural shift in industry fundamentals have occurred, equal weight should be accorded to DCF results based on history and those based on analysts' forecasts.[22]

He goes on to say that while both are imperfect proxies, they both bring

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[21] *See* Cross-Examination of Dr. William E. Avera, Vectren South, IURC Cause No. 43839 Transcript D-102, lines 19–23.

[22] Roger A. Morin, Regulatory Finance: Utilities' Cost of Capital (Arlington, VA: Public Utilities Reports. 1994) p. 157.

"information to the judgment process" from different perspectives.

Q: Are there any problems with relying solely on analysts' forecasts?

A: Yes. One of the principle assumptions in the DCF methodology is that the growth rate input is one that represents long-term and sustainable growth. This is not the case for analysts' forecasts. Bradford Cornell's research supports this position concluding:

> The practical problem raised by relying on analysts forecasts is that such forecasts typically have short horizons. Services that aggregate forecasts, including those by IBES and Zacks Investment Research, do not provide forecasts beyond 5 years. From the standpoint of the DCF model, which extends into perpetuity, this horizon is too short.[23]

Q: Do you agree that the investors' return expectations are the only relevant consideration when estimating the cost of equity?

A: No. While Dr. Avera makes this assertion in his testimony,[24] we must also apply the test of reasonableness to investors' expectations. It is not unreasonable for investors to expect above-normal returns for a defined period of time. However, if they expect that above-normal returns will continue indefinitely, their initial "optimism" would seem to be an "irrational exuberance" and, as such, must be adjusted to inject more reality into their expectations.

Q: Are you suggesting that investors do not use analysts' forecasts?

A: No. Investors use analysts' forecasts as an input to their individual analyses to varying degrees. As Dr. Avera states in his direct testimony, "any claims that analysts' estimates are not relied upon by investors are illogical given the reality of a

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[23] Bradford Cornell, The Equity Risk Premium: The Long-Run Future of the Stock Market (New York: John Wiley & Sons, Inc. 1999) p. 106.

[24] See, Direct Testimony of Dr. William E. Avera, Vectren South, IURC Cause No. 43839, p. 29, lines 4–6.

competitive market for investment advice."[25] This is observed in the marketing of retail brokerage accounts where potential customers are offered access to not only investment research but also various tools to perform fundamental and technical analyses. To the extent that investors follow a particular analyst or analyst team, they more than likely have also developed a sense for the "investment proclivities" of that analyst or team. They would then adjust the forecast based on the leanings of the analyst to fit their perceptions of the investment. Additionally, many institutional investors have in-house groups to perform independent research to give them supplemental information to analysts' forecasts or to provide information that is not biased by non-market forces.

VIII. CONCLUSION

Q: Please summarize the OUCC's recommendations with regard to your testimony in this Cause.

A: The cost of equity estimates produced by my various analyses are summarized in Table KLK-5 below:

Table KLK-5
Recommendation Summary

Methodology	Midpoint	Average
Capital Asset Pricing Model	8.21	8.10
Constant-Growth DCF	8.90	9.13
Two-Stage DCF	9.00	9.42

Based on my review of each model's results and assessment of the proxy groups, I gave more weight to the two-stage DCF and to the utility proxy group. Given this, I concluded that the appropriate cost of equity is 9.25 percent in a range of 8.0 to 9.5

[25] Id. at lines 11–12.

percent.

Q: Does this conclude your testimony?

A: Yes, it does.

Exhibit KLK-1

Vectren South
Cost of Capital

Weighted Average Cost of Capital
Investor-Provided Capital

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	50.07%	6.25%	3.13%
Common Equity	49.93%	9.25%	4.62%
Total Capital	100.00%		7.75%

Weighted Average Cost of Capital
for Ratesetting Purposes

Capital Source	Capitalization Ratio	Cost Rate	Weighted Cost Rate
Long-Term Debt	43.58%	6.25%	2.72%
Common Equity	43.47%	9.25%	4.02%
Customer Deposits	0.49%	3.43%	0.02%
Cost-Free Capital	12.07%	0.00%	0.00%
JDITC	0.40%	7.75%	0.03%
Total Capital	100.00%		6.79%

Exhibit KLK-2

Capital Asset Pricing Model Results
Utility Proxy Group

	Total Returns		
	Geometric	Arithmetic	Midpoint
Large Stocks	0.098	0.118	0.108
LT Gov't Bonds	0.054	0.058	0.056
Equity Risk Premium	0.044	0.06	0.052
Risk-free rate[1]			0.0457

				CAPM		
Company	**Ticker**	**Beta (β)**		Geometric	Arithmetic	Midpoint
Allete	ALE	0.7		7.65%	8.77%	8.21%
Alliant Energy	LNT	0.7		7.65%	8.77%	8.21%
Con. Edison	ED	0.65		7.43%	8.47%	7.95%
Dominion Resources	D	0.7		7.65%	8.77%	8.21%
Duke Energy	DUK	0.65		7.43%	8.47%	7.95%
FPL Group, Inc.	FPL	0.75		7.87%	9.07%	8.47%
NSTAR	NST	0.65		7.43%	8.47%	7.95%
OGE Energy Corp.	OGE	0.75		7.87%	9.07%	8.47%
PG&E Corp.	PCG	0.55		6.99%	7.87%	7.43%
Portland General	POR	0.75		7.87%	9.07%	8.47%
Progress Energy	PGN	0.6		7.21%	8.17%	7.69%
Scana Corp.	SCG	0.65		7.43%	8.47%	7.95%
Sempra Energy	SRE	0.85		8.31%	9.67%	8.99%
Southern Company	SO	0.55		6.99%	7.87%	7.43%
Vectren Corp.	VVC	0.75		7.87%	9.07%	8.47%
Wisconsin Energy	WEC	0.65		7.43%	8.47%	7.95%
Xcel Energy	XEL	0.65		7.43%	8.47%	7.95%
		0.55	**Minimum**	6.99%	7.87%	7.43%
		0.85	**Maximum**	8.31%	9.67%	8.99%
		0.68	**Average**	7.56%	8.65%	8.10%
		0.70	**Midpoint**	7.65%	8.77%	8.21%

Quartile ranges	8.99%
	8.47%
	7.95%
	7.95%
	7.43%

[1] *Source: 30-year US Treasury bond yield, 5-month average - Jan 1 to Jun 2 2010*

Exhibit KLK-3

Capital Asset Pricing Model Results
Non-Utility Proxy Group

	Total Returns		
	Geometric	Arithmetic	Mipoint
Large Stocks	0.098	0.118	0.108
LT Gov't Bonds	0.054	0.058	0.056
Equity Risk Premium	0.044	0.06	0.052
Risk-free rate[1]			0.0457

			CAPM		
Company	**Ticker**	**Beta (β)**	Geometric	Arithmetic	Midpoint
3M Company	MMM	0.8	8.09%	9.37%	8.73%
Abbott Labs	ABT	0.6	7.21%	8.17%	7.69%
Alberto-Culver	ACV	0.6	7.21%	8.17%	7.69%
Allergan, Inc.	AGN	0.9	8.53%	9.97%	9.25%
Automatic Data Proc.	ADP	0.7	7.65%	8.77%	8.21%
Bard (C.R.)	BCR	0.6	7.21%	8.17%	7.69%
Baxter Int'l, Inc.	BAX	0.6	7.21%	8.17%	7.69%
Becton-Dickinson	BDX	0.6	7.21%	8.17%	7.69%
Bemis Co.	BMS	0.9	8.53%	9.97%	9.25%
Bristol-Myers Squibb	BMY	0.75	7.87%	9.07%	8.47%
Brown-Foreman 'B'	BF/B	0.7	7.65%	8.77%	8.21%
Cardinal Health	CAH	0.89	8.49%	9.91%	9.20%
Chevron Corp.	CVX	0.9	8.53%	9.97%	9.25%
Chubb Corp.	CB	0.9	8.53%	9.97%	9.25%
Coca-Cola	KO	0.6	7.21%	8.17%	7.69%
Colgate-Palmolive	CL	0.55	6.99%	7.87%	7.43%
ConAgra Foods	CAG	0.65	7.43%	8.47%	7.95%
Costco Wholesale	COST	0.75	7.87%	9.07%	8.47%
CVS Caremark Corp.	CVS	0.8	8.09%	9.37%	8.73%
Disney (Walt)	DIS	1	8.97%	10.57%	9.77%
Du Pont	DD	1.1	9.41%	11.17%	10.29%
Eaton Corp.	ETN	1.05	9.19%	10.87%	10.03%
Ecolab Inc.	ECL	0.8	8.09%	9.37%	8.73%
Emerson Electric	EMR	1.05	9.19%	10.87%	10.03%
Everest Re Group Ltd.	RE	0.8	8.09%	9.37%	8.73%
Exxon Mobil Corp.	XOM	0.75	7.87%	9.07%	8.47%
General Dynamics, Corp.	GD	0.95	8.75%	10.27%	9.51%
General Mills, Inc.	GIS	0.5	6.77%	7.57%	7.17%
Grainger	GWW	0.95	8.75%	10.27%	9.51%
Heinz	HNZ	0.7	7.65%	8.77%	8.21%
Hewlett-Packard	HPQ	0.95	8.75%	10.27%	9.51%
Home Depot	HD	0.95	8.75%	10.27%	9.51%

Hormel Foods	HRL	0.65		7.43%	8.47%	7.95%
Illinois Tool Works	ITW	0.95		8.75%	10.27%	9.51%
Int'l Business Machines	IBM	0.9		8.53%	9.97%	9.25%
Intel Corp.	INTC	1.05		9.19%	10.87%	10.03%
ITT Corp.	ITT	1		8.97%	10.57%	9.77%
Johnson & Johnson	JNJ	0.6		7.21%	8.17%	7.69%
Kellogg	K	0.6		7.21%	8.17%	7.69%
Kimberly-Clark	KMB	0.55		6.99%	7.87%	7.43%
Kraft Foods	KFT	0.65		7.43%	8.47%	7.95%
Eli Lilly	LLY	0.8		8.09%	9.37%	8.73%
Lockheed Martin	LMT	0.85		8.31%	9.67%	8.99%
McCormick & Co.	MKC	0.55		6.99%	7.87%	7.43%
McDonald's Corp.	MCD	0.65		7.43%	8.47%	7.95%
McKesson Corp.	MCK	0.8		8.09%	9.37%	8.73%
Medtronic, Inc.	MDT	0.75		7.87%	9.07%	8.47%
Microsoft Corp.	MSFT	0.8		8.09%	9.37%	8.73%
NIKE, Inc. 'B'	NKE	0.85		8.31%	9.67%	8.99%
Northrop Grumman	NOC	0.8		8.09%	9.37%	8.73%
Oracle Corp.	ORCL	0.9		8.53%	9.97%	9.25%
PepsiCo, Inc.	PEP	0.6		7.21%	8.17%	7.69%
Pfizer, Inc.	PFE	0.75		7.87%	9.07%	8.47%
PPG Inds	PPG	1.05		9.19%	10.87%	10.03%
Procter & Gamble	PG	0.6		7.21%	8.17%	7.69%
Raytheon Co.	RTN	0.7		7.65%	8.77%	8.21%
Sigma-Aldrich	SIAL	0.95		8.75%	10.27%	9.51%
Stryker Corp.	SYK	0.8		8.09%	9.37%	8.73%
Sysco Corp.	SYY	0.75		7.87%	9.07%	8.47%
TJX Companies	TJX	0.85		8.31%	9.67%	8.99%
United Parcel Service	UPS	0.85		8.31%	9.67%	8.99%
United Technologies	UTX	0.95		8.75%	10.27%	9.51%
Verizon Communications	VZ	0.7		7.65%	8.77%	8.21%
Wal-Mart Stores	WMT	0.6		7.21%	8.17%	7.69%
Walgreen Co.	WAG	0.75		7.87%	9.07%	8.47%
Waste Management	WM	0.8		8.09%	9.37%	8.73%
Wyeth	WYE		***no longer traded***			
		0.7839394				
			Minimum	6.77%	7.57%	7.17%
			Maximum	9.41%	11.17%	10.29%
			Average	8.02%	9.27%	8.65%
			Midpoint	8.09%	9.37%	8.73%

Quartile Ranges	10.29%
	9.25%
	8.73%
	7.95%
	7.17%

[1] *Source: 30-year US Treasury bond yield, 5-month average - Jan 1 to Jun 2 2010*

Exhibit KLK-4

Discounted Cash Flow - Constant Growth Model Results
Utility Proxy Group

			Dividend Yields							Cost of Equity Estimates					
Company	**Ticker**		**P_0 [1]**	**DIV_1 [2]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield[2]**	**5-Year Avg. Yield[2]**	**Value Line Yield[3]**	**US GDP[4]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield**	**5-Year Avg. Yield**	**Value Line Yield**		
Allete	ALE	12/31	$ 32.49	$ 1.76	5.42%	5.30%	4.20%	5.20%	4.45%	9.87%	9.75%	8.65%	9.65%		
Alliant Energy	LNT	12/31	$ 29.97	$ 1.58	5.27%	4.70%	4.50%	5.20%	4.45%	9.72%	9.15%	8.95%	9.65%		
Con. Edison	ED	12/31	$ 44.75	$ 2.38	5.32%	5.40%	5.10%	5.50%	4.45%	9.77%	9.85%	9.55%	9.95%		
Dominion Resources	D	12/31	$ 38.50	$ 1.83	4.75%	4.60%	3.80%	4.80%	4.45%	9.20%	9.05%	8.25%	9.25%		
Duke Energy	DUK	12/31	$ 16.72	$ 0.96	5.74%	5.90%	6.10%	6.00%	4.45%	10.19%	10.35%	10.55%	10.45%		
FPL Group, Inc.	FPL	12/31	$ 52.68	$ 2.00	3.80%	4.20%	3.10%	4.30%	4.45%	8.25%	8.65%	7.55%	8.75%		
NSTAR	NST	12/31	$ 36.29	$ 1.60	4.41%	4.60%	3.80%	4.90%	4.45%	8.86%	9.05%	8.25%	9.35%		
OGE Energy Corp.	OGE	12/31	$ 36.60	$ 1.45	3.96%	3.80%	4.30%	4.00%	4.45%	8.41%	8.25%	8.75%	8.45%		
PG&E Corp.	PCG	12/31	$ 44.50	$ 1.82	4.09%	4.30%	3.50%	4.10%	4.45%	8.54%	8.75%	7.95%	8.55%		
Portland General	POR	12/31	$ 20.37	$ 1.02	5.01%	5.30%	5.30%	5.30%	4.45%	9.46%	9.75%	9.75%	9.75%		
Progress Energy	PGN	12/31	$ 40.30	$ 2.48	6.15%	6.40%	5.50%	6.60%	4.45%	10.60%	10.85%	9.95%	11.05%		
Scana Corp.	SCG	12/31	$ 37.12	$ 1.90	5.12%	5.10%	4.50%	5.40%	4.45%	9.57%	9.55%	8.95%	9.85%		
Sempra Energy	SRE	12/31	$ 55.90	$ 1.56	2.79%	3.10%	2.60%	3.30%	4.45%	7.24%	7.55%	7.05%	7.75%		
Southern Company	SO	12/31	$ 32.81	$ 1.75	5.33%	5.40%	4.50%	5.60%	4.45%	9.78%	9.85%	8.95%	10.05%		
Vectren Corp.	VVC	12/31	$ 24.50	$ 1.36	5.55%	5.70%	4.90%	5.50%	4.45%	10.00%	10.15%	9.35%	9.95%		
Wisconsin Energy	WEC	12/31	$ 49.32	$ 1.60	3.24%	3.20%	2.30%	3.20%	4.45%	7.69%	7.65%	6.75%	7.65%		
Xcel Energy	XEL	12/31	$ 21.08	$ 0.98	4.65%	4.70%	4.50%	4.80%	4.45%	9.10%	9.15%	8.95%	9.25%		
															All Values
			$ 36.11	$ 1.65				**Adjusted for Reasonableness Range**		10.60%	10.85%	10.55%	11.05%	**Maximum**	11.05%
								(6.25% to 12.68%)		7.24%	7.55%	6.75%	7.65%	**Minimum**	6.75%
										9.19%	9.26%	8.71%	9.37%	**Mean**	9.13%
										8.92%	9.20%	8.65%	9.35%	**Midpoint**	8.90%
									Quartile ranges	10.60%	10.85%	10.55%	11.05%		11.05%
										9.78%	9.85%	9.35%	9.95%		9.80%
										9.46%	9.15%	8.95%	9.65%		9.23%
										8.54%	8.75%	8.25%	8.75%		8.55%
										7.24%	7.55%	6.75%	7.65%		6.75%

[1] Closing stock price on the first trading day of the 2010 (4 Jan 2010), adjusted for dividends

[2] Morningstar, Inc.

[3] The Value Line Investment Survey (dates)

[4] Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010 to 2020

Exhibit KLK-5

Discounted Cash Flow - Constant Growth Model Results
Non-Utility Proxy Group

			Dividend Yields							Cost of Equity Estimates			
Company	**Ticker**		**P_0 [1]**	**DIV_1 [2]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield[2]**	**5-Year Avg. Yield[2]**	**Value Line Yield[3]**	**US GDP[4]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield**	**5-Year Avg. Yield**	**Value Line Yield**
3M Company	MMM	12/31	$ 82.48	$ 2.10	2.55%	2.60%	2.60%	2.60%	4.45%	7.00%	7.05%	7.05%	7.05%
Abbott Labs	ABT	12/31	$ 54.07	$ 1.76	3.26%	3.20%	2.60%	3.00%	4.45%	7.71%	7.65%	7.05%	7.45%
Alberto-Culver	ACV	9/30	$ 27.09	$ 0.34	1.26%	1.20%	1.20%	1.10%	4.45%	5.71%	5.65%	5.65%	5.55%
Allergan, Inc.	AGN	12/31	$ 63.27	$ 0.20	0.32%	0.30%	0.40%	0.30%	4.45%	4.77%	4.75%	4.85%	4.75%
Automatic Data Proc.	ADP	6/30	$ 34.50	$ 1.36	3.94%	3.10%	2.40%	3.30%	4.45%	8.39%	7.55%	6.85%	7.75%
Bard (C.R.)	BCR	12/31	$ 78.52	$ 0.68	0.87%	0.80%	0.70%	0.80%	4.45%	5.32%	5.25%	5.15%	5.25%
Baxter Int'l, Inc.	BAX	12/31	$ 58.01	$ 1.16	2.00%	2.00%	2.40%	2.10%	4.45%	6.45%	6.45%	6.85%	6.55%
Becton-Dickinson	BDX	9/30	$ 67.64	$ 1.48	2.19%	1.90%	1.40%	1.90%	4.45%	6.64%	6.35%	5.85%	6.35%
Bemis Co.	BMS	12/31	$ 29.76	$ 0.92	3.09%	3.10%	2.90%	3.00%	4.45%	7.54%	7.55%	7.35%	7.45%
Bristol-Myers Squibb	BMY	12/31	$ 25.63	$ 1.28	4.99%	4.90%	4.80%	4.90%	4.45%	9.44%	9.35%	9.25%	9.35%
Brown-Foreman 'B'	BF/B	4/30	$ 45.65	$ 1.20	2.63%	2.20%	2.40%	2.30%	4.45%	7.08%	6.65%	6.85%	6.75%
Cardinal Health	CAH	6/30	$ 18.53	$ 0.70	3.78%	2.00%	1.30%	2.10%	4.45%	8.23%	6.45%	5.75%	6.55%
Chevron Corp.	CVX	12/31	$ 78.31	$ 2.72	3.47%	3.70%	3.10%	3.70%	4.45%	7.92%	8.15%	7.55%	8.15%
Chubb Corp.	CB	12/31	$ 49.30	$ 1.48	3.00%	2.90%	2.30%	2.90%	4.45%	7.45%	7.35%	6.75%	7.35%
Coca-Cola	KO	12/31	$ 56.58	$ 1.76	3.11%	3.30%	2.80%	3.00%	4.45%	7.56%	7.75%	7.25%	7.45%
Colgate-Palmolive	CL	12/31	$ 82.39	$ 2.12	2.57%	2.50%	2.10%	2.30%	4.45%	7.02%	6.95%	6.55%	6.75%
ConAgra Foods	CAG	5/31	$ 18.44	$ 0.80	4.34%	3.10%	3.50%	3.40%	4.45%	8.79%	7.55%	7.95%	7.85%
Costco Wholesale	COST	8/30	$ 50.67	$ 0.72	1.42%	1.20%	1.10%	1.20%	4.45%	5.87%	5.65%	5.55%	5.65%
CVS Caremark Corp.	CVS	12/31	$ 32.89	$ 0.35	1.06%	1.00%	0.70%	1.00%	4.45%	5.51%	5.45%	5.15%	5.45%
Disney (Walt)	DIS	10/3	$ 27.35	$ 0.35	1.28%	1.00%	1.00%	1.20%	4.45%	5.73%	5.45%	5.45%	5.65%
Du Pont	DD	12/31	$ 33.83	$ 1.64	4.85%	4.60%	4.30%	5.00%	4.45%	9.30%	9.05%	8.75%	9.45%
Eaton Corp.	ETN	12/31	$ 63.82	$ 2.00	3.13%	2.70%	2.60%	3.00%	4.45%	7.58%	7.15%	7.05%	7.45%
Ecolab Inc.	ECL	12/31	$ 45.09	$ 0.62	1.38%	1.40%	1.20%	1.50%	4.45%	5.83%	5.85%	5.65%	5.95%
Emerson Electric	EMR	9/30	$ 38.49	$ 1.34	3.48%	2.80%	2.50%	3.10%	4.45%	7.93%	7.25%	6.95%	7.55%
Everest Re Group Ltd.	RE	12/31	$ 84.95	$ 1.92	2.26%	2.30%	1.60%	2.20%	4.45%	6.71%	6.75%	6.05%	6.65%
Exxon Mobil Corp.	XOM	12/31	$ 68.70	$ 1.68	2.45%	2.50%	1.90%	2.60%	4.45%	6.90%	6.95%	6.35%	7.05%
General Dynamics, Corp	GD	12/31	$ 68.82	$ 1.68	2.44%	2.30%	1.70%	2.30%	4.45%	6.89%	6.75%	6.15%	6.75%
General Mills, Inc.	GIS	5/31	$ 50.05	$ 1.96	3.92%	2.70%	2.70%	2.70%	4.45%	8.37%	7.15%	7.15%	7.15%
Grainger	GWW	12/31	$ 96.80	$ 1.84	1.90%	1.70%	1.70%	2.00%	4.45%	6.35%	6.15%	6.15%	6.45%
Heinz	HNZ	4/29	$ 33.33	$ 1.68	5.04%	3.60%	3.40%	4.10%	4.45%	9.49%	8.05%	7.85%	8.55%
Hewlett-Packard	HPQ	10/31	$ 38.42	$ 0.32	0.83%	0.60%	0.80%	0.60%	4.45%	5.28%	5.05%	5.25%	5.05%
Home Depot	HD	1/31	$ 28.18	$ 0.95	3.37%	2.90%	2.70%	3.10%	4.45%	7.82%	7.35%	7.15%	7.55%
Hormel Foods	HRL	10/25	$ 36.09	$ 0.84	2.33%	2.00%	1.90%	2.20%	4.45%	6.78%	6.45%	6.35%	6.65%
Illinois Tool Works	ITW	12/31	$ 48.57	$ 1.24	2.55%	2.70%	2.30%	2.70%	4.45%	7.00%	7.15%	6.75%	7.15%
Int'l Business Machines	IBM	12/31	$ 131.86	$ 2.20	1.67%	1.70%	0.80%	1.80%	4.45%	6.12%	6.15%	5.25%	6.25%
Intel Corp.	INTC	12/26	$ 20.14	$ 0.63	3.13%	3.00%	2.30%	3.10%	4.45%	7.58%	7.45%	6.75%	7.55%
ITT Corp.	ITT	12/31	$ 49.31	$ 1.00	2.03%	1.90%	1.10%	1.70%	4.45%	6.48%	6.35%	5.55%	6.15%
Johnson & Johnson	JNJ	1/3	$ 64.19	$ 1.96	3.05%	3.00%	2.60%	3.20%	4.45%	7.50%	7.45%	7.05%	7.65%
Kellogg	K	1/2	$ 52.45	$ 1.50	2.86%	2.90%	2.60%	2.80%	4.45%	7.31%	7.35%	7.05%	7.25%
Kimberly-Clark	KMB	12/31	$ 63.57	$ 2.64	4.15%	4.40%	3.40%	3.70%	4.45%	8.60%	8.85%	7.85%	8.15%
Kraft Foods	KFT	12/31	$ 27.43	$ 1.16	4.23%			3.90%	4.45%	8.68%	4.45%	4.45%	8.35%
Eli Lilly	LLY	12/31	$ 35.32	$ 1.96	5.55%	5.40%	3.80%	5.60%	4.45%	10.00%	9.85%	8.25%	10.05%

Exhibit KLK-5

Discounted Cash Flow - Constant Growth Model Results
Non-Utility Proxy Group

			Dividend Yields							Cost of Equity Estimates					
Company	**Ticker**		**P_0 [1]**	**DIV_1 [2]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield[2]**	**5-Year Avg. Yield[2]**	**Value Line Yield[3]**	**US GDP[4]**	**DIV_1 / P_0**	**Forward Annual Dividend Yield**	**5-Year Avg. Yield**	**Value Line Yield**		
Lockheed Martin	LMT	12/31	$ 76.23	$ 2.52	3.31%	3.00%	2.20%	3.20%	4.45%	7.76%	7.45%	6.65%	7.65%		
McCormick & Co.	MKC	11/30	$ 35.96	$ 1.04	2.89%	2.70%	2.30%	2.80%	4.45%	7.34%	7.15%	6.75%	7.25%		
McDonald's Corp.	MCD	12/31	$ 62.25	$ 2.20	3.53%	3.30%	2.70%	3.50%	4.45%	7.98%	7.75%	7.15%	7.95%		
McKesson Corp.	MCK	3/31	$ 34.40	$ 0.48	1.40%	0.80%	0.70%	0.80%	4.45%	5.85%	5.25%	5.15%	5.25%		
Medtronic, Inc.	MDT	4/24	$ 29.47	$ 0.82	2.78%	1.80%	1.10%	2.00%	4.45%	7.23%	6.25%	5.55%	6.45%		
Microsoft Corp.	MSFT	6/30	$ 23.69	$ 0.52	2.20%	1.80%	1.60%	1.90%	4.45%	6.65%	6.25%	6.05%	6.35%		
NIKE, Inc. 'B'	NKE	5/31	$ 58.25	$ 1.08	1.85%	1.50%	1.70%	1.70%	4.45%	6.30%	5.95%	6.15%	6.15%		
Northrop Grumman	NOC	12/31	$ 56.45	$ 1.72	3.05%	2.70%	2.40%	2.80%	4.45%	7.50%	7.15%	6.85%	7.25%		
Oracle Corp.	ORCL	5/31	$ 19.78	$ 0.20	1.01%	0.80%	0.80%	0.90%	4.45%	5.46%	5.25%	5.25%	5.35%		
PepsiCo, Inc.	PEP	12/26	$ 60.73	$ 1.80	2.96%	2.70%	2.30%	3.00%	4.45%	7.41%	7.15%	6.75%	7.45%		
Pfizer, Inc.	PFE	12/31	$ 18.75	$ 0.72	3.84%	4.20%	4.60%	3.90%	4.45%	8.29%	8.65%	9.05%	8.35%		
PPG Inds	PPG	12/31	$ 60.07	$ 2.16	3.60%	3.30%	3.60%	3.60%	4.45%	8.05%	7.75%	8.05%	8.05%		
Procter & Gamble	PG	6/30	$ 50.83	$ 1.76	3.46%	2.80%	2.50%	2.90%	4.45%	7.91%	7.25%	6.95%	7.35%		
Raytheon Co.	RTN	12/31	$ 52.21	$ 1.24	2.38%	2.20%	2.10%	2.30%	4.45%	6.83%	6.65%	6.55%	6.75%		
Sigma-Aldrich	SIAL	12/31	$ 51.35	$ 0.64	1.25%	1.20%	1.10%	1.30%	4.45%	5.70%	5.65%	5.55%	5.75%		
Stryker Corp.	SYK	12/31	$ 52.16	$ 0.60	1.15%	1.10%	0.70%	1.10%	4.45%	5.60%	5.55%	5.15%	5.55%		
Sysco Corp.	SYY	6/27	$ 22.07	$ 1.00	4.53%	3.50%	2.70%	3.60%	4.45%	8.98%	7.95%	7.15%	8.05%		
TJX Companies	TJX	1/30	$ 38.38	$ 0.48	1.25%	1.10%	1.30%	1.30%	4.45%	5.70%	5.55%	5.75%	5.75%		
United Parcel Service	UPS	12/31	$ 57.70	$ 1.88	3.26%	3.00%	2.50%	3.20%	4.45%	7.71%	7.45%	6.95%	7.65%		
United Technologies	UTX	12/31	$ 71.17	$ 1.70	2.39%	2.40%	2.00%	2.10%	4.45%	6.84%	6.85%	6.45%	6.55%		
Verizon Communicatior	VZ	12/31	$ 32.81	$ 1.90	5.79%	6.40%	5.00%	5.80%	4.45%	10.24%	10.85%	9.45%	10.25%		
Wal-Mart Stores	WMT	1/31	$ 53.18	$ 1.21	2.28%	2.20%	1.70%	2.20%	4.45%	6.73%	6.65%	6.15%	6.65%		
Walgreen Co.	WAG	8/31	$ 33.78	$ 0.55	1.63%	1.60%	1.00%	1.50%	4.45%	6.08%	6.05%	5.45%	5.95%		
Waste Management	WM	12/31	$ 33.83	$ 1.26	3.72%	3.70%	2.90%	3.80%	4.45%	8.17%	8.15%	7.35%	8.25%		
Wyeth	WYE					***no longer traded***									
			$ 49.18	$ 1.30				**Adjusted for Reasonableness Range**		6.30%	6.25%	6.35%	6.25%	**Minimum**	6.25%
								(6.25% to 12.68%)		10.24%	10.85%	9.45%	10.25%	**Maximum**	10.85%
										7.69%	7.45%	7.27%	7.49%	**Mean**	7.49%
										8.27%	8.55%	7.90%	8.25%	**Midpoint**	8.55%
								Quartile ranges		6.30%	6.25%	6.35%	6.25%		6.25%
										6.95%	6.83%	6.75%	6.75%		6.83%
										7.56%	7.30%	7.05%	7.45%		7.35%
										8.20%	7.75%	7.40%	7.93%		7.92%
										10.24%	10.85%	9.45%	10.25%		10.85%

[1] Closing stock price on the first trading day of the 2010 (4 Jan 2010), adjusted for dividends

[2] Morningstar, Inc.

[3] The Value Line Investment Survey (dates)

[4] Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010 to 2020

Shaded values represent values outside the range of reasonableness

Exhibit KLK-6

Discounted Cash Flow - Two-Stage Model Results
Utility Proxy Group

Company	Ticker		P_0 [1]	DPS_0 [2]	g_{1S} [3]	n	g_{LT} [4]	$P_{0,calc}$	k_e [5]
Allete	ALE	12/31	$ 32.49	$ 1.76	5.00%	5	4.45%	$ 32.49	10.24%
Alliant Energy	LNT	12/31	$ 29.97	$ 1.50	4.40%	5	4.45%	$ 29.97	9.67%
Con. Edison	ED	12/31	$ 44.75	$ 2.36	4.00%	5	4.45%	$ 44.75	9.85%
Dominion Resources	D	12/31	$ 38.50	$ 1.75	5.00%	5	4.45%	$ 38.50	9.31%
Duke Energy	DUK	12/31	$ 16.72	$ 0.94	4.00%	5	4.45%	$ 16.72	10.21%
FPL Group, Inc.	FPL	12/31	$ 52.68	$ 1.89	10.00%	5	4.45%	$ 52.68	9.21%
NSTAR	NST	12/31	$ 36.29	$ 1.50	5.50%	5	4.45%	$ 36.29	8.97%
OGE Energy Corp.	OGE	12/31	$ 36.60	$ 1.42	4.80%	5	4.45%	$ 36.60	8.57%
PG&E Corp.	PCG	12/31	$ 44.50	$ 1.65	7.00%	5	4.45%	$ 44.50	8.78%
Portland General	POR	12/31	$ 20.37	$ 1.00	6.00%	5	4.45%	$ 20.37	9.93%
Progress Energy	PGN	12/31	$ 40.30	$ 2.48	4.00%	5	4.45%	$ 40.30	10.76%
Scana Corp.	SCG	12/31	$ 37.12	$ 1.87	5.00%	5	4.45%	$ 37.12	9.84%
Sempra Energy	SRE	12/31	$ 55.90	$ 1.52	7.00%	5	4.45%	$ 55.90	7.63%
Southern Company	SO	12/31	$ 32.81	$ 1.73	5.40%	5	4.45%	$ 32.81	10.19%
Vectren Corp.	VVC	12/31	$ 24.50	$ 1.31	5.00%	5	4.45%	$ 24.50	10.17%
Wisconsin Energy	WEC	12/31	$ 49.32	$ 1.08	9.00%	5	4.45%	$ 49.32	7.25%
Xcel Energy	XEL	12/31	$ 21.08	$ 0.97	6.00%	5	4.45%	$ 21.08	9.59%

Adjusted for Reasonableness Range	7.25%	**Minimum**
(6.25% to 12.68%)	10.76%	**Maximum**
	9.67%	**Median**
	9.42%	**Average**
	9.00%	**Midpoint**
Quartile ranges	7.25%	
	8.97%	
	9.67%	
	10.17%	
	10.76%	

[1] Closing stock price on the first trading day of the 2010 (4 Jan 2010), adjusted for dividends

[2] The Value Line Investment Survey (dates)

[3] Petitioner's Exhibit WEA-3, First Call estimates

[4] Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010 to 2020

[5] Calculated using MS Excel's Goal Seek function

Exhibit KLK-7

Discounted Cash Flow - Two-Stage Model Results
Non-Utility Proxy Group

Company	Ticker		P_0 [1]	DPS_0 [2]	g_{1S} [3]	n	g_{LT} [4]	$P_{0,calc}$	k_e [5]
3M Company	MMM	12/31	$ 82.48	$ 2.06	10.70%	5	4.45%	$ 82.48	7.88%
Abbott Labs	ABT	12/31	$ 54.07	$ 1.60	12.00%	5	4.45%	$ 54.07	8.73%
Alberto-Culver	ACV	9/30	$ 27.09	$ 0.31	12.00%	5	4.45%	$ 27.09	6.13%
Allergan, Inc.	AGN	12/31	$ 63.27	$ 0.20	14.00%	5	4.45%	$ 63.27	4.96%
Automatic Data Proc.	ADP	6/30	$ 34.50	$ 1.34	11.00%	5	4.45%	$ 34.50	9.81%
Bard (C.R.)	BCR	12/31	$ 78.52	$ 0.67	14.00%	5	4.45%	$ 78.52	5.82%
Baxter Int'l, Inc.	BAX	12/31	$ 58.01	$ 1.10	12.00%	5	4.45%	$ 58.01	7.21%
Becton-Dickinson	BDX	9/30	$ 67.64	$ 1.40	12.00%	5	4.45%	$ 67.64	7.46%
Bemis Co.	BMS	12/31	$ 29.76	$ 0.91	7.00%	5	4.45%	$ 29.76	8.03%
Bristol-Myers Squibb	BMY	12/31	$ 25.63	$ 1.25	8.90%	5	4.45%	$ 25.63	10.60%
Brown-Foreman 'B'	BF/B	4/30	$ 45.65	$ 1.18	8.50%	5	4.45%	$ 45.65	7.68%
Cardinal Health	CAH	6/30	$ 18.53	$ 0.70	10.00%	5	4.45%	$ 18.53	9.45%
Chevron Corp.	CVX	12/31	$ 78.31	$ 2.69	7.00%	5	4.45%	$ 78.31	8.46%
Chubb Corp.	CB	12/31	$ 49.30	$ 1.40	9.00%	5	4.45%	$ 49.30	8.07%
Coca-Cola	KO	12/31	$ 56.58	$ 1.67	8.10%	5	4.45%	$ 56.58	8.07%
Colgate-Palmolive	CL	12/31	$ 82.39	$ 1.76	10.50%	5	4.45%	$ 82.39	7.37%
ConAgra Foods	CAG	5/31	$ 18.44	$ 0.78	8.00%	5	4.45%	$ 18.44	9.60%
Costco Wholesale	COST	8/30	$ 50.67	$ 0.72	12.00%	5	4.45%	$ 50.67	6.53%
CVS Caremark Corp.	CVS	12/31	$ 32.89	$ 0.32	13.50%	5	4.45%	$ 32.89	5.97%
Disney (Walt)	DIS	10/3	$ 27.35	$ 0.35	5.00%	5	4.45%	$ 27.35	5.82%
Du Pont	DD	12/31	$ 33.83	$ 1.64	6.00%	5	4.45%	$ 33.83	9.86%
Eaton Corp.	ETN	12/31	$ 63.82	$ 2.00	8.00%	5	4.45%	$ 63.82	8.28%
Ecolab Inc.	ECL	12/31	$ 45.09	$ 0.59	13.00%	5	4.45%	$ 45.09	6.45%
Emerson Electric	EMR	9/30	$ 38.49	$ 1.33	10.00%	5	4.45%	$ 38.49	9.04%
Everest Re Group Ltd.	RE	12/31	$ 84.95	$ 1.92	10.00%	5	4.45%	$ 84.95	7.47%
Exxon Mobil Corp.	XOM	12/31	$ 68.70	$ 1.68	7.00%	5	4.45%	$ 68.70	7.31%
General Dynamics, Corp	GD	12/31	$ 68.82	$ 1.52	9.00%	5	4.45%	$ 68.82	7.28%
General Mills, Inc.	GIS	5/31	$ 50.05	$ 1.86	8.10%	5	4.45%	$ 50.05	9.00%
Grainger	GWW	12/31	$ 96.80	$ 1.84	12.00%	5	4.45%	$ 96.80	7.22%
Heinz	HNZ	4/29	$ 33.33	$ 1.68	7.00%	5	4.45%	$ 33.33	10.32%
Hewlett-Packard	HPQ	10/31	$ 38.42	$ 0.32	10.50%	5	4.45%	$ 38.42	5.60%
Home Depot	HD	1/31	$ 28.18	$ 0.91	10.00%	5	4.45%	$ 28.18	8.74%
Hormel Foods	HRL	10/25	$ 36.09	$ 0.78	10.00%	5	4.45%	$ 36.09	7.34%
Illinois Tool Works	ITW	12/31	$ 48.57	$ 1.24	10.00%	5	4.45%	$ 48.57	7.85%
Int'l Business Machines	IBM	12/31	$ 131.86	$ 2.20	10.00%	5	4.45%	$ 131.86	6.69%
Intel Corp.	INTC	12/26	$ 20.14	$ 0.58	10.00%	5	4.45%	$ 20.14	8.27%
ITT Corp.	ITT	12/31	$ 49.31	$ 0.89	5.00%	5	4.45%	$ 49.31	6.38%
Johnson & Johnson	JNJ	1/3	$ 64.19	$ 1.96	8.00%	5	4.45%	$ 64.19	8.18%
Kellogg	K	1/2	$ 52.45	$ 1.47	9.00%	5	4.45%	$ 52.45	8.03%
Kimberly-Clark	KMB	12/31	$ 63.57	$ 2.46	9.20%	5	4.45%	$ 63.57	9.41%
Kraft Foods	KFT	12/31	$ 27.43	$ 1.16	7.00%	5	4.45%	$ 27.43	9.38%
Eli Lilly	LLY	12/31	$ 35.32	$ 1.96	2.80%	5	4.45%	$ 35.32	9.84%
Lockheed Martin	LMT	12/31	$ 76.23	$ 2.40	10.00%	5	4.45%	$ 76.23	8.63%
McCormick & Co.	MKC	11/30	$ 35.96	$ 0.98	9.00%	5	4.45%	$ 35.96	7.93%
McDonald's Corp.	MCD	12/31	$ 62.25	$ 2.10	9.00%	5	4.45%	$ 62.25	8.74%
McKesson Corp.	MCK	3/31	$ 34.40	$ 0.48	13.00%	5	4.45%	$ 34.40	6.58%
Medtronic, Inc.	MDT	4/24	$ 29.47	$ 0.80	10.00%	5	4.45%	$ 29.47	8.08%
Microsoft Corp.	MSFT	6/30	$ 23.69	$ 0.52	10.00%	5	4.45%	$ 23.69	7.38%
NIKE, Inc. 'B'	NKE	5/31	$ 58.25	$ 1.04	12.00%	5	4.45%	$ 58.25	7.05%
Northrop Grumman	NOC	12/31	$ 56.45	$ 1.72	10.00%	5	4.45%	$ 56.45	8.50%
Oracle Corp.	ORCL	5/31	$ 19.78	$ 0.20	10.00%	5	4.45%	$ 19.78	5.81%
PepsiCo, Inc.	PEP	12/26	$ 60.73	$ 1.80	10.50%	5	4.45%	$ 60.73	8.48%
Pfizer, Inc.	PFE	12/31	$ 18.75	$ 0.66	0.40%	5	4.45%	$ 18.75	7.50%
PPG Inds	PPG	12/31	$ 60.07	$ 2.14	3.00%	5	4.45%	$ 60.07	7.94%
Procter & Gamble	PG	6/30	$ 50.83	$ 1.76	10.00%	5	4.45%	$ 50.83	9.04%
Raytheon Co.	RTN	12/31	$ 52.21	$ 1.24	10.00%	5	4.45%	$ 52.21	7.62%
Sigma-Aldrich	SIAL	12/31	$ 51.35	$ 0.60	10.00%	5	4.45%	$ 51.35	6.02%
Stryker Corp.	SYK	12/31	$ 52.16	$ 0.25	13.00%	5	4.45%	$ 52.16	5.19%
Sysco Corp.	SYY	6/27	$ 22.07	$ 0.97	12.00%	5	4.45%	$ 22.07	10.74%
TJX Companies	TJX	1/30	$ 38.38	$ 0.48	12.00%	5	4.45%	$ 38.38	6.28%
United Parcel Service	UPS	12/31	$ 57.70	$ 1.82	11.50%	5	4.45%	$ 57.70	8.91%
United Technologies	UTX	12/31	$ 71.17	$ 1.58	8.00%	5	4.45%	$ 71.17	7.17%
Verizon Communicatior	VZ	12/31	$ 32.81	$ 1.87	5.00%	5	4.45%	$ 32.81	10.54%
Wal-Mart Stores	WMT	1/31	$ 53.18	$ 1.12	11.00%	5	4.45%	$ 53.18	7.39%
Walgreen Co.	WAG	8/31	$ 33.78	$ 0.53	14.50%	5	4.45%	$ 33.78	6.98%

Exhibit KLK-7

Discounted Cash Flow - Two-Stage Model Results
Non-Utility Proxy Group

Company	Ticker		P_0 [1]	DPS_0 [2]	g_{1S} [3]	n	g_{LT} [4]	$P_{0,calc}$	k_e [5]
Waste Management	WM	12/31	$ 33.83	$ 1.19	11.00%	5	4.45%	$ 33.83	9.31%
Wyeth	WYE	*no longer traded*							

Adjusted for Reasonableness Range	6.28%	**Minimum**
(6.25% to 12.68%)	10.74%	**Maximum**
	8.07%	**Median**
	8.21%	**Average**
	8.51%	**Midpoint**

Quartile range	6.28%
	7.37%
	8.07%
	9.00%
	10.74%

[1] Closing stock price on the first trading day of the 2010 (4 Jan 2010), adjusted for dividends

[2] The Value Line Investment Survey (dates)

[3] Petitioner's Exhibit WEA-5, First Call estimates

[4] Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2010 to 2020

[5] Calculated using MS Excel's Goal Seek function

Shaded values represent values outside the range of reasonableness

Exhibit KLK-8

Reasonableness Range Determination

Dr. Avera's inputs	
risk-free rate	4.30%
market risk premium	7.60%
Other data	
VVC cost of debt	6.25%
Imputed beta for debt	0.256579
sector beta - electric	0.68
$\beta_s - \beta_d$	0.422833
Range of Reasonableness	
Low end	6.25%
Midpoint	9.46%
High end	12.68%

Exhibit KLK-9

Historical Growth Rate Analysis
Utility Proxy Group

	Value Line Historic Growth					
	Past 10 Years			*Past 5 Years*		
Company	Earnings	Dividends	Book Value	Earnings	Dividends	Book Value
Allete	NA	NA	NA	NA	NA	NA
Alliant Energy	3.00%	-4.50%	2.00%	7.00%	-5.00%	3.00%
Con. Edison	1.00%	1.00%	3.00%	1.50%	1.00%	3.50%
Dominion Resources	7.50%	1.50%	2.50%	5.50%	2.50%	1.50%
Duke Energy	NA	NA	NA	NA	NA	NA
FPL Group, Inc.	7.00%	5.50%	7.00%	9.50%	7.00%	8.00%
NSTAR	5.00%	4.00%	3.50%	5.00%	5.50%	5.50%
OGE Energy Corp.	3.50%	0.50%	4.50%	11.00%	0.50%	7.00%
PG&E Corp.	4.50%	0.50%	1.50%	NA	NA	18.00%
Portland General	NA	NA	NA	NA	NA	NA
Progress Energy	-0.50%	2.50%	5.50%	-6.50%	2.00%	2.50%
Scana Corp.	3.00%	1.50%	4.50%	3.50%	6.50%	4.00%
Sempra Energy	9.00%	-2.00%	9.00%	9.00%	5.00%	16.00%
Southern Company	3.00%	2.00%	1.50%	4.00%	3.00%	5.50%
Vectren Corp.	NA	NA	NA	2.50%	3.50%	4.00%
Wisconsin Energy	7.50%	-4.00%	4.50%	6.00%	4.50%	7.50%
Xcel Energy	-2.50%	-4.00%	-0.50%	1.00%	-4.00%	1.00%
Mean	3.92%	0.35%	3.73%	4.54%	2.46%	6.21%
Median	3.50%	1.00%	3.50%	5.00%	3.00%	4.75%
Average of Mean and Median Figures (all)						**3.50%**

Mean	4.72%	1.85%	4.02%	5.36%	3.57%	6.12%
Median	4.50%	1.50%	4.00%	5.25%	3.50%	4.75%
Average of Mean and Median Figures (all non-negative)						**4.10%**

Exhibit KLK-10

Projected Growth Rate Analysis
Utility Proxy Group

	Value Line Projected Growth Rates					
	Est'd '06-'08 to '12-'14			*Internal Growth*		
Company	**Earnings**	**Dividends**	**Book Value**	**Return on Equity**	**Dividend Payout**	**Internal Growth**
Allete	-1.00%	3.00%	3.00%	9.00%	75.00%	2.25%
Alliant Energy	4.00%	7.00%	4.00%	10.00%	67.00%	3.30%
Con. Edison	2.50%	1.00%	0.30%	9.50%	64.00%	3.42%
Dominion Resources	7.00%	5.50%	7.00%	14.50%	54.00%	6.67%
Duke Energy	5.50%	NA	0.50%	8.00%	72.00%	2.24%
FPL Group, Inc.	7.00%	6.50%	9.00%	11.50%	49.00%	5.87%
NSTAR	5.50%	6.00%	5.00%	14.00%	66.00%	4.76%
OGE Energy Corp.	4.50%	2.50%	7.00%	11.50%	48.00%	5.98%
PG&E Corp.	6.50%	7.50%	6.50%	12.00%	51.00%	5.88%
Portland General	3.50%	5.50%	2.50%	8.50%	60.00%	3.40%
Progress Energy	4.50%	1.00%	2.50%	9.00%	73.00%	2.43%
Scana Corp.	3.50%	2.00%	4.50%	10.00%	60.00%	4.00%
Sempra Energy	5.50%	8.50%	8.50%	12.00%	35.00%	7.80%
Southern Company	4.50%	4.00%	5.00%	13.00%	70.00%	3.90%
Vectren Corp.	5.00%	3.00%	4.00%	11.00%	67.00%	3.63%
Wisconsin Energy	8.00%	13.50%	6.00%	11.50%	48.00%	5.98%
Xcel Energy	6.50%	3.00%	4.50%	10.50%	54.00%	4.83%
Mean	4.85%	4.97%	4.69%	10.91%	59.59%	4.49%
Median	5.00%	4.75%	4.50%	11.00%	60.00%	4.00%
Average of Mean and Median Figures			**4.79%**	**Average**		**4.25%**

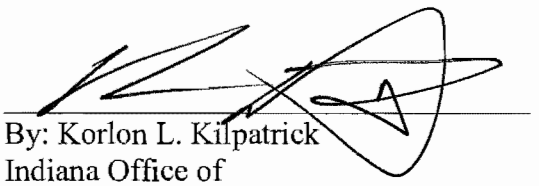
includes all values, negative and non-negative

Mean	5.22%	4.97%	4.69%
Median	5.25%	4.75%	4.50%
Average of Mean and Median Figures			**4.90%**

includes only non-negative values

AFFIRMATION

I affirm, under the penalties for perjury, that the foregoing representations are true.



By: Korlon L. Kilpatrick
Indiana Office of
Utility Consumer Counselor

June 25, 2010
Date

Cause No. 43839